

Title (en)  
THIN FILM MAGNETIC HEAD

Publication  
**EP 0480324 A3 19930616 (EN)**

Application  
**EP 91116953 A 19911004**

Priority  
JP 27451390 A 19901012

Abstract (en)  
[origin: EP0480324A2] A magnetic head comprising a substrate (1), upper and lower magnetic films (2a, 2b) forming a magnetic circuit on the substrate, the magnetic circuit having a narrow portion forming a gap (6) for interacting with a recording medium (10), and a coil (3) surrounding the magnetic circuit and buried in an insulation layer between the upper and lower magnetic films. The magnetic films (2a, 2b) have a magnetic anisotropy with components of an in-plane (parallel to the magnetic film surface) magnetic anisotropy  $H_p$  and a perpendicular (perpendicular to the magnetic film surface) magnetic anisotropy  $H_v$ . The perpendicular magnetic anisotropy  $H_v$  is given to the magnetic films by utilisation of an inverse magnetostriction effect, an induced magnetic anisotropy or a crystalline magnetic anisotropy. <IMAGE> <IMAGE>

IPC 1-7  
**G11B 5/31**

IPC 8 full level  
**G11B 5/31** (2006.01)

CPC (source: EP KR US)  
**G11B 5/127** (2013.01 - KR); **G11B 5/3113** (2013.01 - EP US)

Citation (search report)  
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• [A] WO 8905505 A1 19890615 - DIGITAL EQUIPMENT CORP [US]  
• [A] US 4944805 A 19900731 - NAKANISHI KANJI [JP]  
• [Y] IBM TECHNICAL DISCLOSURE BULLETIN. vol. 19, no. 8, January 1977, ARMONK NEW YORK US pages 3234 - 3235 D.A. THOMPSON & E.P. VALSTYN 'Laminated films with alternately skewed axis for magnetic transducers'  
• [XP] SPERIOSU V. S.: "MAGNETIC THIN FILMS IN RECORDING TECHNOLOGY.", IBM JOURNAL OF RESEARCH AND DEVELOPMENT., INTERNATIONAL BUSINESS MACHINES CORPORATION, NEW YORK, NY., US, vol. 34., no. 06., 1 November 1990 (1990-11-01), US, pages 884 - 901., XP000264890, ISSN: 0018-8646

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0480324 A2 19920415; EP 0480324 A3 19930616; EP 0480324 B1 19960529**; CA 2053330 A1 19920413; CA 2053330 C 19960220; DE 69119860 D1 19960704; DE 69119860 T2 19961002; JP 2533255 B2 19960911; JP H05266423 A 19931015; KR 920008677 A 19920528; KR 950014893 B1 19951216; US 5187628 A 19930216

DOCDB simple family (application)  
**EP 91116953 A 19911004**; CA 2053330 A 19911011; DE 69119860 T 19911004; JP 26192791 A 19911009; KR 910017839 A 19911011; US 76574291 A 19910926